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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 09/930,325 | 08/15/2001 | Ulises J. Ciciarelli | RSW920010066US1 | 3522 |
| 7590 | 05/06/2005 | | EXAMINER | |
| IBM Corporation T81/062 PO Box 12195 Research Triangle Park, NC 27709 | | | VU, TUAN A | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 2193 | |

DATE MAILED: 05/06/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/930,325

Applicant(s)

CICCIARELLI ET AL.

Examiner

Tuan A. Vu

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11/26/04.
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 November 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 20050418
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

1. This action is responsive to the Applicant's response filed 11/26/2004.

As indicated in Applicant's response, claims 1-2, 9, 13 have been amended. Claims 1-16 are pending in the office action.

The Terminal Disclaimer has been acknowledged and filed 4/15/2005.

Information Disclosure Statement

2. The information disclosure statement (IDS) submitted and filed on 9/30/2004 and submitted 11/26/2004 is in compliance with the provisions of 37 CFR 1.97; and has been considered by the examiner. However, on the IDS filed in 9/30/2004, a publication (pub. date 1/2002) by inventor Daynes et al., has been presented with an incorrect publication identification number; this number is now corrected to show 2002/0013939.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-2, 4-6, and 8-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shrader et al., USPN: 5,870,611 (hereinafter Shrader), in view of Bourke-Dunphy et al., USPubN: 2002/0133814 (hereinafter Bourke)

As per claim 1, Shrader discloses a method of improving installation of software packages, comprising:

defining a object model as a framework for creating software installation packages (e.g. Fig. 2A-B; *Object* - Fig. 17A) to be created from the model;

wherein the model (e.g. Network installation Product 50 – Fig. 2A; *MODEL RSP, top level ... templates* – col. 15, lines 5-37) is independent of any particular package to be created and specifies that each package has a suite level (e.g. *Application container 52, code server container 62; Custom file container 64* – Fig. 2A) and a component level (e.g. *Application 100, Custom File 500* – Fig. 2A – Note: a object framework at the top level – see Fig. 17A - to configure multiple application containers categorized per group planning and leading to corresponding installation package reads on model or object independent of a particular package and purported to generate instances of customized package),

wherein the suite level serves as a container for components to be included at the component level, and each component comprises a plurality of objects (e.g. Fig. 2A).

Shrader does not explicitly disclose one or more topology objects, wherein each topology object identifies one or more selected one of the components. However, Shrader discloses a group container and a group-in-plan (e.g. Group 54 – Fig. 2A, Fig. 4) being identified for sharing the same software as configured by the administrator (col. 6, lines 41-50) in conjunction with configuration fulfillment via a response file dictated by same rules among a group of network machines (e.g. col. 5, lines 36-47), i.e. a common configuration for a group of family of similar operating system machines in a network, thus a shared topology wherein one or more components are selected -- for sharing a same configuration - is disclosed.

Further, Shrader discloses populating the object model to describe a particular software installation package and topologies for deployment of that particular package (e.g. Fig. 3, 5; *CatIP*, *RspFile* – Fig. 9; Figs. 17A-17B; *instances* - col. 8, lines 32-40).

But Shrader does not explicitly disclose defining one or more rules for execution by a rule engine, each rule specifying one or more specified conditions are to be matched and an action to be taken when the rule engine is executing, and wherein said conditions pertain to a target runtime environment and at least one action may be used to select from among the topologies. Shrader discloses a configuration matching process to generate a response file based on answering installation and configuration related questions for a group of machines mapping a same set of rules (e.g. *same rules* - col. 5, lines 21-47) and use of attributes/keywords for or customization of files and/or instantiating of objects to be included in the installation plan (Fig. 5-6, Fig. 7); hence has implied the use of rule and mapping to generate configuration file targeted for a specific set of machines. Analogous to the installation attribute or criteria mapping or conditions answering as by Shrader for selecting objects is furthered by use of rule engine at configuration for package installation based dependency among objects is evidenced by Bourke (para 0024 – pg. 2; para 0056 – pg. 4). In view of the matching and selecting of target files to implement installation of machines having same configuration rules by Shrader and approach by Bourke's dependency rule engine, it would have been obvious for one of ordinary skill in the art at the time the invention was made to provide a rule-based engine executed at runtime for selecting appropriate objects as by Bourke used in a specific installation configuration as intended by Shrader because this would enable a solid form for conditions matching at the runtime installation/configuration with a set of rules defining predetermined actions by means of

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which rule non-fulfilling objects can be immediately detected or appropriately required objects selected (see Bourke, para 0025) to implement to selectively adapting of response files as intended by Shrader via the network grouping of configuration and reusing response files as mentioned above.

As per claim 2, Shrader discloses creating container and instantiating it instantiated objects based on attribute mapping as set forth in claim 1; hence has disclosed populating container, or object for suite level with instances or plurality of component level objects as the mapping of attributes is performed.

As per claim 4, Shrader discloses instantiation into objects for a particular component identified for a particular operating system topology and one or more components objects for each component included in the particular package for that topology (refer to Fig. 3, 5; *CatIP*, *RspFile* – Fig. 9; Figs. 17A-17B; instances - col. 8, lines 32-40 - from claim 1).

As per claim 5, Shrader in conjunction with Bourke discloses information about the target runtime environment; and using the information as input into the mapping engine; selecting based upon the matching rule at least one topologies for deployment (*CatIP*, *RspFile* – Fig. 9; Fig. 12-16 – Note: runtime platform information and mapping conditions derived from such information and selecting a set of file or applications for a group based on some attributes being inputted via a user reads on runtime discovering, and selecting the topologies - i.e. groupID- for deployment based thereupon); hence Shrader discloses dynamically discovering information pertaining to the runtime environment for feeding the runtime package building engine, from there, selecting a topology and action based on the mapping and using the populated the object model based on the selected topology (e.g. Fig. 3, 5; *CatIP*, *RspFile* – Fig.

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9; Figs. 17A-17B; *instances* - col. 8, lines 32-40; Fig. 17A-B). The limitation of using rules for matching runtime conditions of rules against user input according to a selection of topology has been addressed in claim 1.

As per claim 6, Shrader discloses identifying target machines on which to apply the installation, and performing the installation to the identified target using such installation package (see col. 7, line 35 to col. 8, line 17); the step of downloading to the identified network workstations would be implicitly disclosed (see col. 5, lines 18-39).

As per claim 8, Shrader (in combination with Bourke) discloses information to the rule engine serves to configure values needed by the topology (e.g. Fig. 3, 5; *CatIP*, *RspFile* – Fig. 9; Figs. 17A-17B; *instances* - col. 8, lines 32-40; Fig. 17A-B).

As per claim 9, this claim is the system claim with means to perform the exact steps corresponding to those of method claim 1; hence is rejected with the corresponding rejection as set forth therein.

As per claims 10 and 11, these claims correspond to claims 5 and 6, respectively, hence are rejected with the corresponding rejection as set forth therein.

As per claim 12, this claim corresponds to claim 8, and is rejected using the rejection therein.

As per claim 13, this claim is the computer-readable product claim with means to perform the exact steps corresponding to those of method claim 1; hence is rejected with the corresponding rejection as set forth therein.

As per claims 14 and 15, these claims are computer-readable product claims corresponding to claims 5 and 6, respectively, hence are rejected with the corresponding rejections as set forth therein.

As per claim 16, this claim is the computer-readable product claim corresponding to claim 8; hence is rejected with the corresponding rejection as set forth therein.

5. Claims 3, and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shrader et al., USPN: 5,870,611, in view of Bourke-Dunphy et al., USPubN: 2002/0133814; and as applied to claims 1, 6; and further in view of Bobick et al., USPubN: 2003/0172135 (hereinafter Bobick).

As per claim 3, Shrader does not teach instantiated objects being JavaBeans but teach template class (*MODEL RSP, top level ... templates* – col. 15, lines 5-37) as well as object-oriented concept for using class and inheritance (col. 5, line 60 to col. 6, line 30). In a system with use of containers in an object-oriented framework, Bobick teaches enterprise JavaBeans (Fig. 17A) for delivery of packaged being grouped by network asset dependencies (Fig. 2B) analogous to that of Bourke and attribute mapping by Shrader. It would have been obvious for one of ordinary skill in the art at the time the invention was made to extend the object-oriented aspect of Shrader's container and package instantiation so that rule for mapping network dependencies is implemented for distributing JavaBeans as taught by Bobick because of the increasing needs of enterprise business dealing with transactions requiring communications with multi-tiered and services, middleware technologies for which the Java and beans technologies can be useful in code portability, extendibility, or platform/protocol, and language accommodation as well as interoperability of applications in a network context (see Bobick para

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0036-0039 -- pg. 3) where as shown by Bobick from above, network assets can be utilized as selective criteria to implement such accommodation in client software distribution as intended by object-oriented packaging by Shrader (combined with Bourke).

As per claim 7, Shrader discloses interconnected network-based package installation framework (re claim 1) involving a plurality of workstations in the LAN (Fig. 2A); but does not teach authentication of server operating the downloading step. Shrader discloses identification of server as attributes for specifying objects container in the customization of packages (col. 10, lines 5-17) and official notice is taken that the concept of identifying who is the source of the transmitted data over a network or who is the recipient of the transmitted data, i.e. via authentication process of a client or a server machine in a session protocol, was a known concept in the art of software distribution in corporate and internet transactions as taught by Bourke or Shrader support of multi-tiered corporate transactions or LAN interconnected stations, at the time the invention was made. Moreover, Bobick teaches assets being distributed across network and beans session deployment via descriptor and authenticating of assets (e.g. para 0344 and Table - col. 23). It is noted that a session implicitly discloses authentication of interconnected machines by means of internet or handshake protocol. Thus, for one skill in the art at the time the invention was made, adding this well-known authentication process to the installation process by Shrader, which is exemplified by the implied session-based authentication by Bobick would have been obvious because in a network of interconnecting machines it would not benefit the recipient of the installation package should the source or recipient provider turns out to be an untrusted machine; or cause data to fall into a potentially harmful recipient environment where it

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does not belong, this according to known concept of session-based authentication of source and/or recipient machines and/or of received data during a session as taught by Bobick.

Response to Arguments

6. Applicant's arguments with respect to claims 1-16 have been considered but are moot in view of the new ground(s) of rejection which have been necessitated by amendments.

Conclusion

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tuan A Vu whose telephone number is (272) 272-3735. The examiner can normally be reached on 8AM-4:30PM/Mon-Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kakali Chaki can be reached on (571)272-3719.

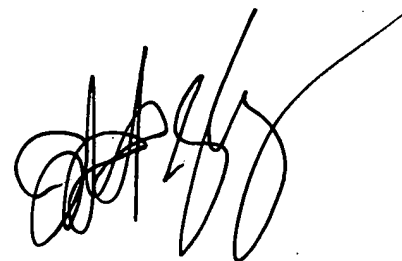
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The fax phone number for the organization where this application or proceeding is assigned is (571) 273-3735 (for non-official correspondence – please consult Examiner before using) or 703-872-9306 (for official correspondence) or redirected to customer service at 571-272-3609.

Any inquiry of a general nature or relating to the status of this application should be directed to the TC 2100 Group receptionist: 571-272-2100.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

VAT
April 21, 2005

A handwritten signature in black ink, appearing to read 'T. Ingberg', with a long horizontal line extending from the end of the signature.

**TODD INGBERG
PRIMARY EXAMINER**